Bug Advisory

Title	ESP32-C61 Series Chips Bug Advisory
Issue Date	2026/01/08
Advisory Number	AR2025-009
Serial Number	NA
Version	V1.0

Issue Summary

The following issues have been identified in the ESP32-C61 series chips:

Issue 1: Bluetooth LE Connection Drop
When ESP32-C61 chips (chip revision v1.0 and later) run ESP-IDF v5.5.1 and pair with mobile phones or other Bluetooth LE devices over encrypted connections, a MIC (Message Integrity Check) error may occur, causing the connection to drop unexpectedly (error code 0x3d).

Issue 2: PSRAM Reset Hang
When ESP32-C61 series chips run ESP-IDF v5.5.1 with PSRAM enabled, CPU or digital reset operations may hang. This triggers a secondary RTC WDT reset. If the rollback feature (CONFIG_BOOTLOADER_APP_ROLLBACK_ENABLE, disabled by default) is enabled, this sequence may result in an OTA rollback.

Issue 3: AES and SHA Access to PSRAM
When ESP32-C61 chips run ESP-IDF v5.5.1, PSRAM data may be corrupted when AES or SHA hardware accesses buffers that are not aligned to a 16-byte boundary.

Issue 4: Wi-Fi and BLE Coexistence Stability
When ESP32-C61 series chips run ESP-IDF v5.5.1, Brown-out Reset may occur frequently during Wi-Fi/BLE coexistence stress testing.

Impact Analysis

Affected Product Series:

These issues affect the ESP32-C61 series of chips.

ESP-IDF Affected Versions:

Issue 1: Bluetooth LE Connection Drop

ESP-IDF Branch	Affected Commit IDs	Affected ESP-IDF Versions
master	Commits before c705b71 (excluded)	No official release yet
release/v6.0	Commits before b65d10f (excluded)	No official release yet
release/v5.5	Commits before 443bbf5 (excluded)	v5.5.1

Issue 2: PSRAM Reset Hang

ESP-IDF Branch	Affected Commit IDs	Affected ESP-IDF Versions
master	Commits before c467c91 (excluded)	No official release yet
release/v6.0	Commits before 3df1ee1 (excluded)	v6.0-beta1
release/v5.5	Commits before ddb9f5d (excluded)	v5.5.1

Issue 3: AES and SHA Access to PSRAM

ESP-IDF Branch	Affected Commit IDs	Affected ESP-IDF Versions
master	Commits before da1ff70 (excluded)	No official release yet
release/v6.0	Commits before 145de94 (excluded)	v6.0-beta1
release/v5.5	Commits before 86bd3d3 (excluded)	v5.5.1

Issue 4: Wi-Fi and BLE Coexistence Stability

ESP-IDF Branch	Affected Commit IDs	Affected ESP-IDF Versions
master	Commits before c61b0be (excluded)	No official release yet
release/v6.0	Commits before 7e87423 (excluded)	v6.0-beta1
release/v5.5	Commits before b1e3248 (excluded)	5.5.1

Note: ESP32-C61 is supported starting from ESP-IDF v5.5.1.

Mitigation

ESP-IDF Patched Versions:

Issue 1: Bluetooth LE Connection Drop

ESP-IDF Branch	Fixed Commit IDs	Fixed ESP-IDF Versions
master	c705b71	v6.0
release/v6.0	b65d10f	v6.0
release/v5.5	443bbf5	v5.5.2

Issue 2: PSRAM Reset Hang

ESP-IDF Branch	Fixed Commit IDs	Fixed ESP-IDF Versions
master	c467c91	v6.1
release/v6.0	3df1ee1	v6.0
release/v5.5	ddb9f5d	v5.5.2

Issue 3: AES and SHA Access to PSRAM

ESP-IDF Branch	Fixed Commit IDs	Fixed ESP-IDF Versions
master	da1ff70	v6.1
release/v6.0	145de94	v6.0
release/v5.5	86bd3d3	v5.5.2

Issue 4: Wi-Fi and BLE Coexistence Stability

ESP-IDF Branch	Fixed Commit IDs	Fixed ESP-IDF Versions
master	c61b0be	v6.1
release/v6.0	7e87423	v6.0
release/v5.5	b1e3248	v5.5.2

Recommendations for Application Developers

If your application is affected by the issues described above, and you are using an affected ESP-IDF version, it is recommended to upgrade ESP-IDF to the patched ESP-IDF version (see the table above). If you encounter any issues during the upgrade process, please provide Espressif with the ESP-IDF version number or Commit ID. We will confirm and handle related matters as soon as possible.